

Equivalents

Those skilled in the art will recognize, or be able to ascertain using no more than routine experimentation, many equivalents to the specific embodiments of the invention 5 described herein. Such equivalents are intended to be encompassed by the following claims.

What is claimed is:

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1. An isolated nucleic acid molecule comprising a nucleic acid sequence
encoding a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID
NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

5 2. The isolated nucleic acid molecule of claim 1, wherein the polypeptide
consists of the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6,
SEQ ID NO:8, or SEQ ID NO:16.

10 3. An isolated nucleic acid molecule comprising a nucleic acid sequence
encoding a polypeptide comprising at least 25 contiguous amino acids of the amino acid
sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID
NO:16.

15 4. The isolated nucleic acid molecule of claim 3, wherein the polypeptide
comprises at least 50 contiguous amino acids of the amino acid sequence of SEQ ID
NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, or SEQ ID NO:16.

20 5. An isolated nucleic acid molecule comprising at least 50 contiguous
nucleotides of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5,
SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

6. The nucleic acid molecule of claim 5, wherein the nucleic acid molecule
comprises at least 100 contiguous nucleotides of the nucleotide sequence of SEQ ID
NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

25 7. The nucleic acid molecule of claim 5, wherein the nucleic acid molecule
comprises the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ
ID NO:7, SEQ ID NO:15, or SEQ ID NO:17.

30 8. An isolated nucleic acid molecule comprising a nucleic acid sequence
encoding a fusion protein containing at least one pyrin domain, nucleotide binding site

(NBS) domain, or leucine rich repeat domain of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

5 9. An isolated nucleic acid molecule that hybridizes to a nucleic acid molecule
consisting of the nucleotide sequence of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5,
SEQ ID NO:7, SEQ ID NO:15, or SEQ ID NO:17 under conditions of incubation at 45°C
in 6.0X SSC followed by washing in 0.2X SSC/0.1% SDS at 65°C.

10 10. The isolated nucleic acid molecule of claim 1, further comprising vector
nucleic acid sequences.

11. A host cell containing the nucleic acid molecule of claim 1.

15 12. An isolated polypeptide comprising the amino acid sequence of SEQ ID
NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

20 13. The isolated polypeptide of claim 12, wherein the polypeptide consists of the
amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8,
SEQ ID NO:13, or SEQ ID NO:16.

25 14. An isolated polypeptide comprising at least 25 contiguous amino acids of the
amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8,
SEQ ID NO:13, or SEQ ID NO:16.

30 15. The isolated polypeptide of claim 14, wherein the polypeptide comprises at
least 50 contiguous amino acids of the amino acid sequence of SEQ ID NO:2, SEQ ID
NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

35 16. A fusion protein containing at least one pyrin domain, NBS domain, or LRR
domain of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13,
or SEQ ID NO:16.

17. An antibody which selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16.

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18. A method for producing a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16, the method comprising culturing the host cell of claim 11 under conditions in which the polypeptide is expressed.

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19. A method for detecting the presence of a polypeptide in a sample, the method comprising:

(a) contacting the sample with a compound that selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6,

15 SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16; and

(b) determining whether the compound binds to a polypeptide in the sample.

20 20. A kit comprising a compound that selectively binds to a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6,

20 SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 and instructions for use.

21. A method for detecting the presence of a nucleic acid molecule in a sample, the method comprising:

(a) contacting the sample with a nucleic acid probe or primer which selectively hybridizes to the nucleic acid molecule of SEQ ID NO:1, SEQ ID NO:3, SEQ ID NO:5, SEQ ID NO:7, SEQ ID NO:12, SEQ ID NO:14, SEQ ID NO:15, or SEQ ID NO:17; and

(b) determining whether the nucleic acid probe or primer binds to a nucleic acid molecule in the sample.

30 22. A method for identifying a compound that binds to a polypeptide, the method comprising the steps of:

- (a) contacting a cell or a sample comprising a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 with a test compound; and
- (b) determining whether the polypeptide binds to the test compound.

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23. A method for identifying a compound that modulates the activity of a polypeptide, the method comprising:

- (a) contacting a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 with a test compound; and
- (b) determining the effect of the test compound on the activity of the polypeptide to thereby identify a compound which modulates the activity of the polypeptide.

24. A method for modulating the activity of a polypeptide, the method comprising contacting a polypeptide comprising the amino acid sequence of SEQ ID NO:2, SEQ ID NO:4, SEQ ID NO:6, SEQ ID NO:8, SEQ ID NO:13, or SEQ ID NO:16 or a cell expressing the polypeptide with a compound that binds to the polypeptide in a sufficient concentration to modulate the activity of the polypeptide.